

Case 5, slide seminar

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Diagnosis:

Focal Nodular Hyperplasia, in transplanted liver.

This is a 25mm lesion in the tip of the left lobe, with characteristic features of focal nodular hyperplasia^{1,2}. It is a circumscribed, non-encapsulated lesion of hepatocytes, slightly larger than background liver, without atypia. There are some fibrous areas containing thick walled arteries, although no well-developed central scar. The vessels have no accompanying bile ducts, but the fibrous septa are surrounded by ductular reaction and some contain chronic inflammation. There is no necrosis or haemorrhage in the lesion.

The background liver shows mild portal inflammation, consistent with early stage recurrent hepatitis C.

Comment:

The interest in this case is the unusual opportunity to observe the rate of growth of the FNH after transplantation. The MRI features and growth rate became suspicious of hepatocellular carcinoma in this patient previously transplanted for cirrhosis with HCC – although it would be most unusual for a single small HCC to recur in the graft especially at this early stage. There is one report of FNH in a transplanted liver – an 8cm lesion recognised at the time of transplantation, with no change in size over the next 2 years³. FNH represents a local hyperplastic response to abnormal arterial blood flow. They are common and usually discovered incidentally; 85% are less than 5cm diameter.

At 16months post-transplant there is no fibrosis in the background liver. In general, fibrosis in recurrent hepatitis C advances much more quickly in the transplanted than the native liver, in a UK study the average time to cirrhosis was 7.7 years³. This is strongly dependent on donor age, with significantly lower rate of progression in livers from donors age under 40 years.

References:

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